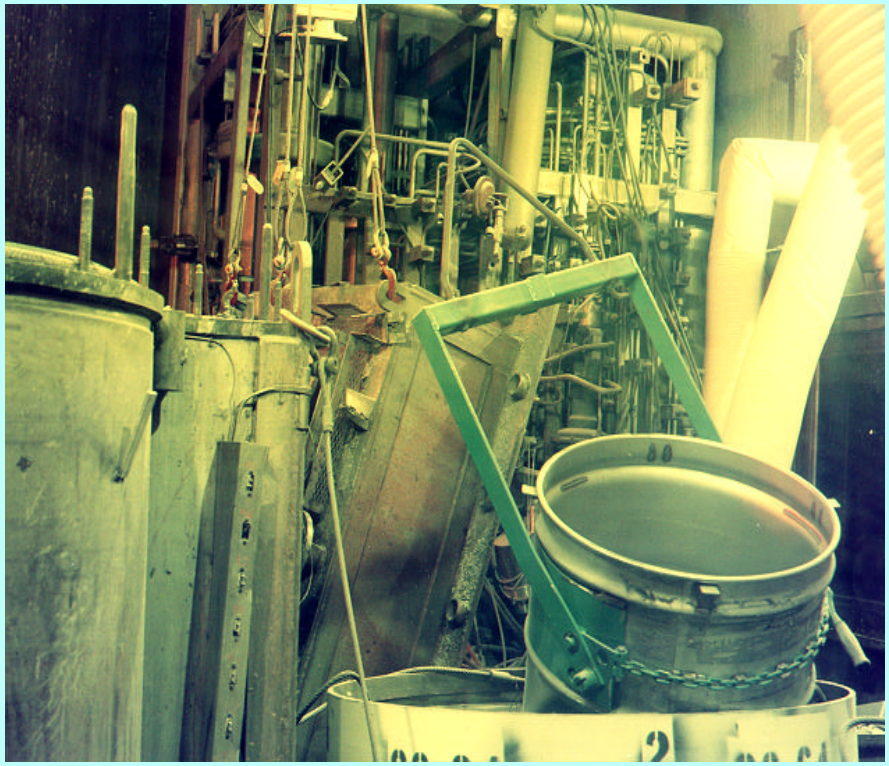
Deploying a Robot Work Platform for Large Hot Cell Deactivation



For equipment/debris removal and other deactivation operations in the 324 Bldg, a robotic work platform will be deployed (suspended) from an overhead crane in the B- Cell. It will be designed to operate with a variety of end effectors, including shears, cutoff saws, decontamination spray heads and detectors for characterization. The work platform will be modular and easily repairable, and will utilize on- board lighting and video.

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Application:

To meet cleanup requirements at the 324 Building at the Hanford Site, there is a need to deploy systems that provide :

- **more rapid and remote size-reduction**
- **debris collection and removal**
- **characterization**
- **decontamination**

Benefits:

- **full reach capabilities that significantly accelerate work tasks**
- **eliminate the need for multiple, specialized tool design and procurement**
- **reduce worker exposure and secondary waste generation**

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Site Needs Addressed:

- **RL-DD05 Characterization of Buildings 324 and 327**
- **RL-DD06 Decontamination of Buildings 324 and 327**
- **RL-DDO7 Fixatives for Buildings 324 and 327**
- **RL-DD08 Remote Cutting Technologies for Buildings 324 and 327**
- **RL-DD10 Radiation Hardened Robotics for Building 324**
- **RL-DD11 Structural Integrity Inspection Technologies - 324/327 Buildings Hot Cell Liners**

Planned Funding Profile (in K's of dollars)

Cost Item	FY 1999	FY 2000	FY 2001	Total Cost
ASTD Funding	1,545	0	0	1,545
324 'B Cell' Project Funding	56	284	2,165	2,505
Total Project Cost	1,601	284	2165	4,050

Minimum Projected Cost Savings is estimated at $2.8 million

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Proposed Schedule:	Planned Schedule
• Issue Request for Proposal	July 1999
• Award Contract	October 1999
• Fabrication/Assembly of System	November 1999 - July 2000
• Personnel Training and Qualification	January 2000 - September 2000
• Cold Testing and Evaluation	May 2000 - July 2000
• Deployment in B-Cell	October 2000

Points of Contact:

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